*Demonstration Lesson: CHapter 17*

*Developing Concepts of decimals and percents (pgs. 328-337) Hope Bledsoe*

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| **Representative TN State Curriculum Standards**  4th Grade:  Grade Level Expectations:  GLE 0406.2.4 Understand and use the connections between fractions and decimals.  Checks for Understanding:  0406.2.11 Use models, benchmarks, and equivalent forms to compare fractions/decimals and locate them on the number line.  0406.2.12 Understand and use decimal numbers up to hundredths and write them as fractions.  State Performance Indicator:  SPI 0406.2.7 Convert improper fractions into mixed numbers and/or decimals.  5th Grade:  Grade Level Expectations:  GLE 0506.2.5 Develop fluency in solving multi-step problems using whole numbers, fractions, mixed numbers, and decimals.  Checks for Understanding:  0506.2.7 Understand the placement of the decimal point in calculations of multiplication and long division, including the placement in the estimation of the answer.  State Performance Indicator:  SPI 0506.2.8 Write terminating decimals in the form of fractions or mixed numbers. | |
| http://www.preboundbooks.com/ws/image/cover/11092/m?ref=vd | Time: 7-10 minutes  Before I read Piece=Part=Portion: Fractions=Decimals=Percents, I will access the student’s prior knowledge of fractions. Then, I will show the student’s the simple steps of turning a fraction into a decimal. Located at each table, there will be different manipulatives that are demonstrated from the book. The student’s will be expected to turn the fraction given into a decimal, depending on their manipulative. While reading, I will have the decimal answer covered and when I come to a certain page, the group with that manipulative will provide the class the decimal form of the fraction. I will assess students on this skill by having them explain how they got the answer. |

**Virtual Manipulatives**

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| Convert Decimals to Fractions and Mixed Numbers  Site: <http://www.ixl.com/math/grade-4/convert-decimals-to-fractions-and-mixed-numbers>  Time: 3 minutes  Description: This virtual manipulative allows students extra practice converting decimals to fractions. |
| Fruit Shoot  Site: <http://www.sheppardsoftware.com/mathgames/fractions/FractionsToDecimals.htm>  Time: 3 minutes  Description: This virtual manipulative allows students extra practice converting fractions into decimals. |

**Part I. Textbook Activities**

Lesson One- Activity 17.1 The Decimal Names the Unit

Time: 5 minutes

Students will display a certain number of base-ten pieces on their desks. Students will write and say how many of each item they have. The students will then position their decimal point accordingly and both write and say the amounts.

Lesson Two- Activity 17.4 Friendly Fractions to Decimals

Time: 5-10 minutes

Students are given a “friendly” fraction to convert to a decimal. They will model using a 10x10 grid. The students will then write and draw an explanation for the decimal equivalent.

Lesson Three- Activity 17.6 Decimals on a Friendly Fraction Line

Time: 5 minutes

Teacher will draw five number lines on the board. Each table will be provided five decimal numbers and will be asked to place each number on the number line in the correct order and to provide the fraction equivalent for each.

Lesson Four- Activity 17.8 Best Match

Time: 7 minutes

On the whiteboard, a scattered arrangement of five familiar fractions and at least five decimals that are close to the fractions but not exact will be displayed. Students are to pair each fraction with the decimal that best matches each fraction.

**Part II. Lesson Plan: Fraction and Decimal Garden**

<http://www.beaconlearningcenter.com/Lessons/1081.htm>

Time: 10 minutes

Students write fractions and decimals using unifix cube models and grid paper. They draw a garden using grid paper and label each section with the correct fraction and decimal to the tenths.